

SYSTEM **P**LANNING & **A**NALYSIS **R**eport

S-61

C.S.A.H. 18

FROM SMETANA ROAD
TO C.S.A.H. 3

OCTOBER, 1971

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**



DEPARTMENT HIGHWAY - Statewide Planning -
Room 807 - Extension 3158

STATE OF MINNESOTA

Office Memorandum

TO : Paul G. Velz
Road Design Engineer

DATE: October 4, 1971

FROM : Morris Gildemeister, Chief
Statewide Planning Section

SUBJECT: CSAH 18, Smetana Road to CSAH 3
System Planning and Analysis Report S-61

The Statewide Planning Section transmits this report in response to James M. Wald of Hennepin County's May 11, 1971 request for the 1975 and 1985 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1975 and 1985 ADT volumes are shown on the maps on pages 3 and 7, respectively.

For each segment numbered on the map on pages 3 and 7, the following data are tabulated on pages 4-6 and 8-10.

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

The basic data, method, and assumptions used to prepare this report are presented on page 11.

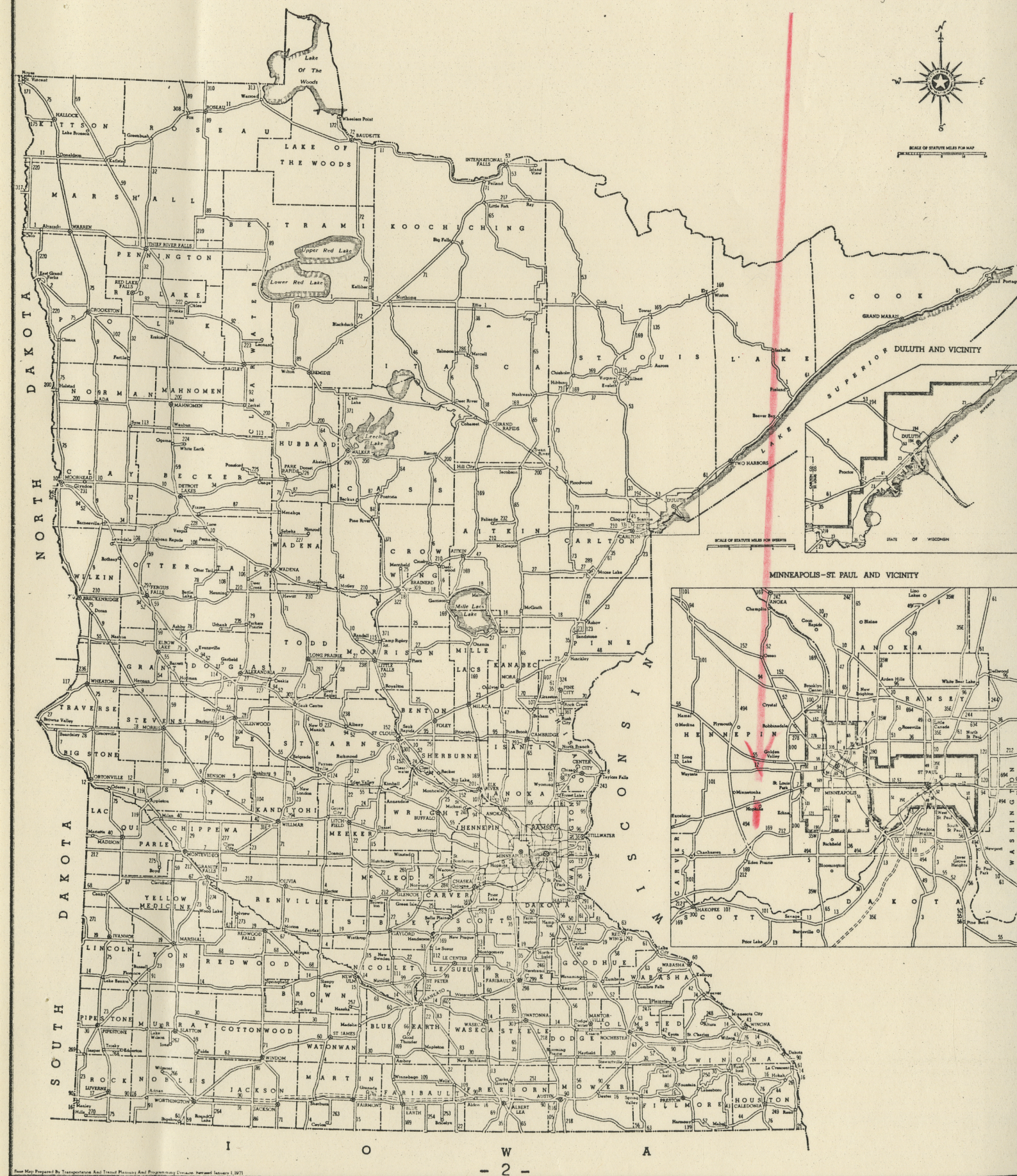
Morris Gildemeister

Morris Gildemeister, Chief
Statewide Planning Section

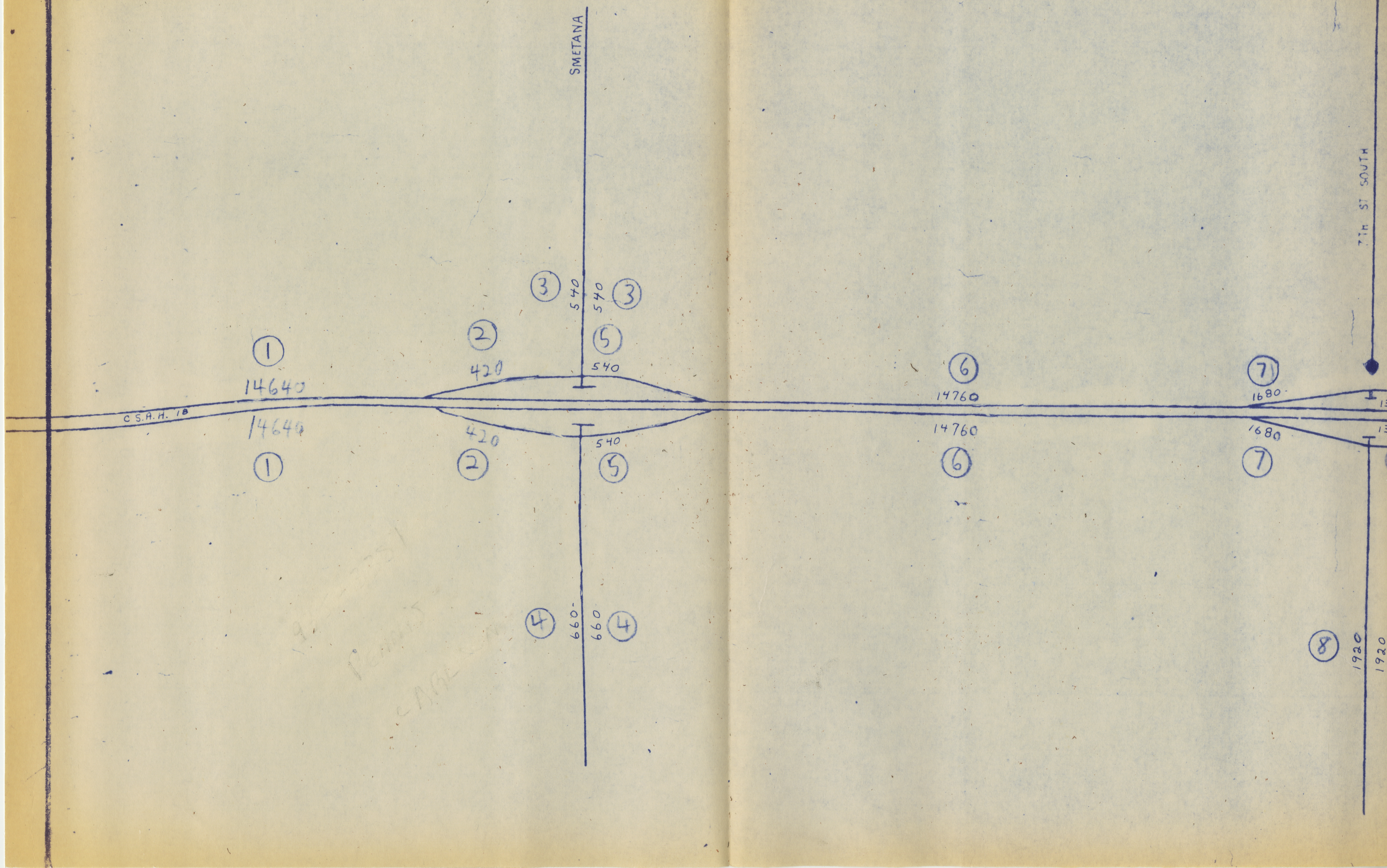
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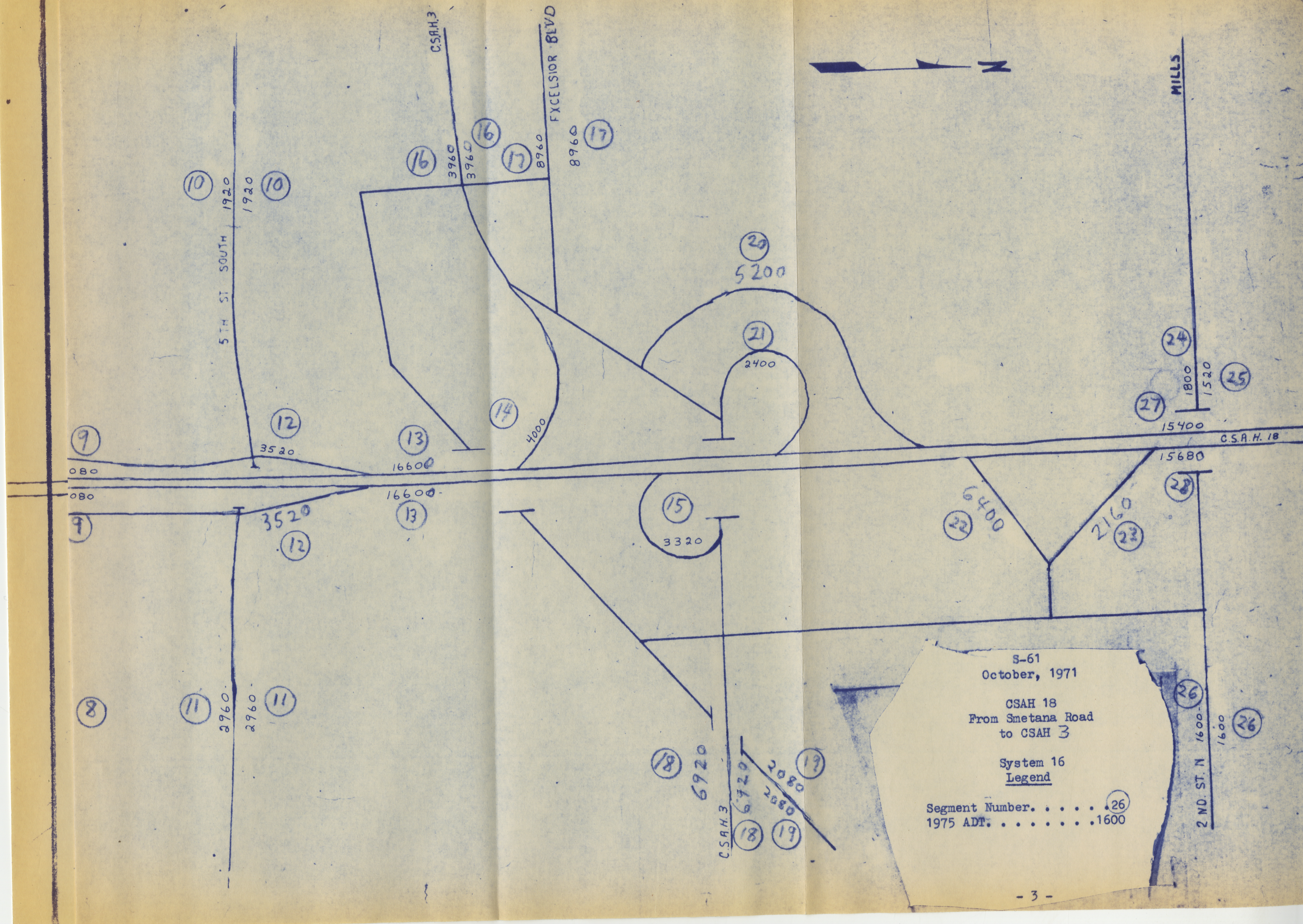
STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
CSAH 18



Base Map Prepared by Transportation and Traffic Planning and Programming Division, January 1, 1971





S-61
 October, 1971
 CSAH 18
 From Smetana Road
 to CSAH 3
 System 16
 Legend
 Segment Number. 26
 1975 ADT. 1600

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 1 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILES
COUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS
DEFINED ON ATTACHED INDEX MAP on page 3 using System "16."

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	13747	405	523	640	524	13866	1596	1841	12270	1828	2840
1	468	12	13	16	12	468	42	59	426	39	94
2	88	1	2	2	2	89	10	8	79	11	12
3	44	-	-	-	-	44	3	2	41	5	3
4	44	-	-	-	-	44	5	4	39	6	3
5	88	1	1	1	1	88	12	4	76	16	6
6	161	1	1	1	1	161	12	2	149	15	2
TOTAL ADT	14640	420	540	660	540	14760	1680	1920	13080	1920	2960
TOTAL H. COMM. ADT	893	15	17	20	16	894	84	79	810	92	120
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
2 = SINGLE UNIT-3 AXLE TRUCKS 6 = BUSES AND TRUCKS WITH TRAILERS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 2 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILES
COUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS
DEFINED ON ATTACHED INDEX MAP on page 3 using System "16."

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	3359	15629	3696	3161	3721	8421	6399	1914	4949	2217	5842
1	94	520	171	93	99	341	348	112	139	103	320
2	18	97	32	17	32	45	45	14	27	19	58
3	6	47	18	10	12	27	32	10	16	11	32
4	8	47	9	3	16	9	6	2	8	6	13
5	18	94	23	10	40	27	19	6	16	14	45
6	17	166	51	26	40	90	71	22	45	30	90
TOTAL ADT	3520	16600	4000	3320	3960	8960	6920	2080	5200	2400	6400
TOTAL H. COMM. ADT	161	971	304	159	239	539	521	166	251	183	558
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
2 = SINGLE UNIT-3 AXLE TRUCKS 6 = BUSES AND TRUCKS WITH TRAILERS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 3 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILES
COUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

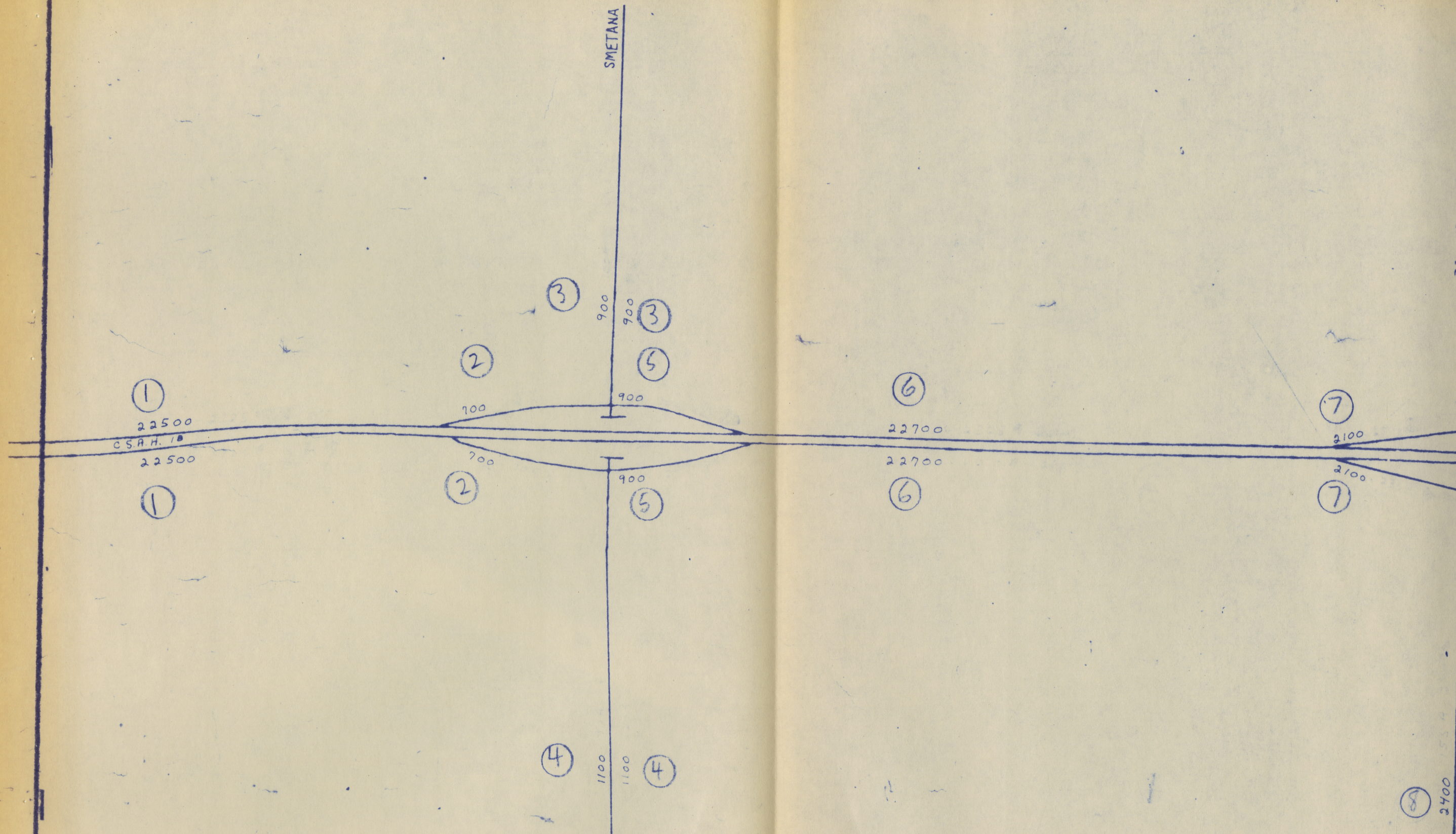
SHOWING

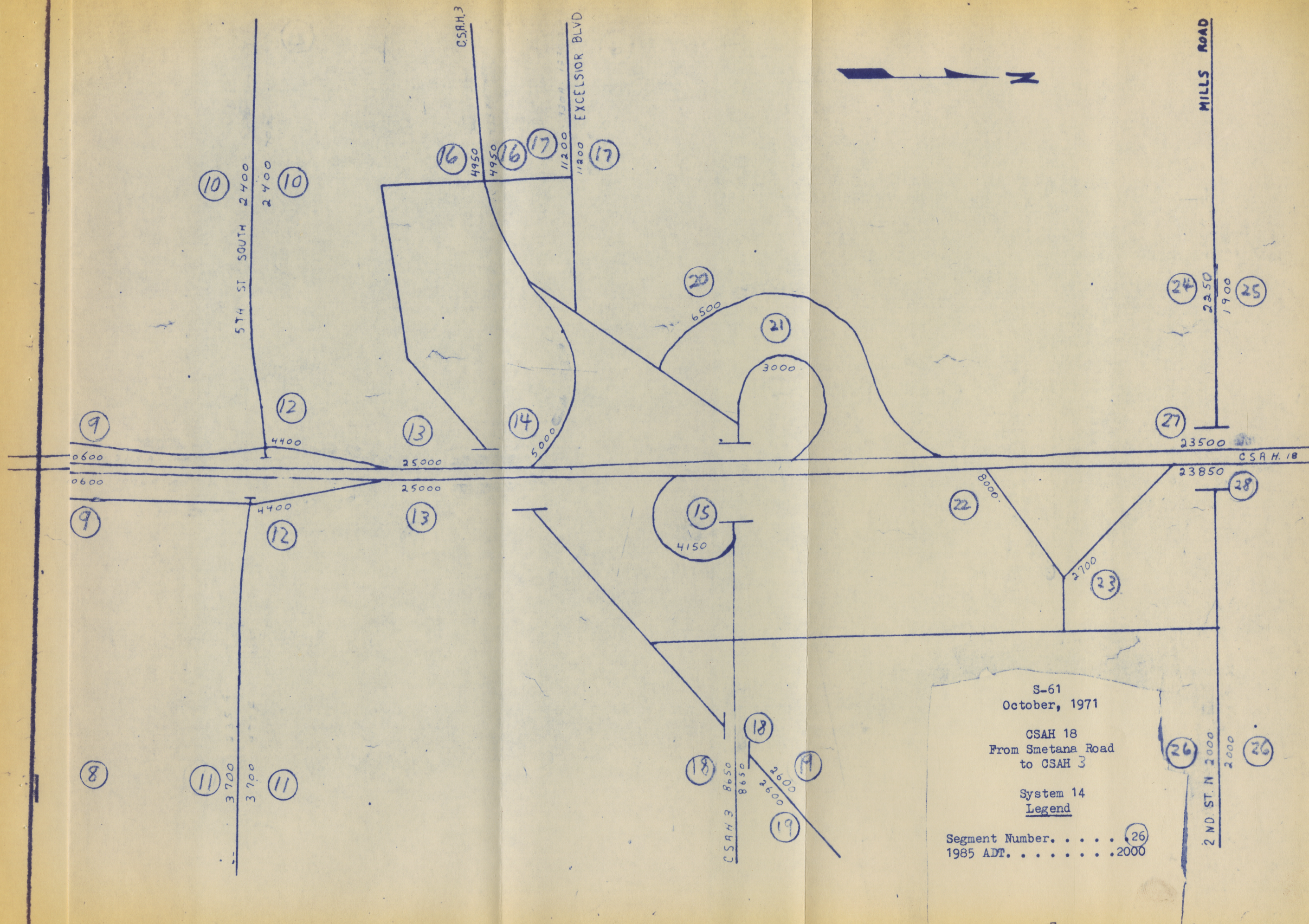
TOTAL ADT ON SEGMENTS 23 THROUGH 28 AS
DEFINED ON ATTACHED INDEX MAP on page 3 using System "16."

VEHICLE # TYPE	SEGMENT NUMBER									
	23	24	25	26	27	28				
0	1975	1705	1440	1514	14665	14923				
1	106	74	62	66	385	399				
2	19	9	7	8	73	75				
3	11	2	2	2	34	36				
4	4	3	2	3	40	41				
5	15	5	5	5	73	74				
6	30	2	2	2	130	132				
TOTAL ADT	2160	1800	1520	1600	15400	15680				
TOTAL H. COMM. ADT	185	95	80	86	735	757				
TOTAL DHV										
DIRECTIONAL DISTRIBUTION										

* VEHICLE TYPE CODE

- 0= PASSENGER CARS AND 4 TIRE TRUCKS
1= SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2= SINGLE UNIT-3 AXLE TRUCKS
3= TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4= TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5= TRACTOR-TRUCK OR SEM-TRAILER - 5 AXLES
6= BUSES AND TRUCKS WITH TRAILERS





TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILESCOUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 ASDEFINED ON ATTACHED INDEX MAP on page 7 using System ¹¹/₁₄.

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	21127	676	871	1065	873	21324	1995	2301	19329	2285	3549
1	720	19	22	27	20	721	52	74	669	48	118
2	135	2	3	4	3	136	13	10	123	14	15
3	68	-	1	1	1	69	4	2	65	7	4
4	68	1	1	1	1	68	6	5	62	7	4
5	135	1	1	1	1	135	15	5	120	20	7
6	247	1	1	1	1	247	15	3	232	19	3
TOTAL ADT	22500	700	900	1100	900	22700	2100	2400	20600	2400	3700
TOTAL H. COMM. ADT	1373	24	29	35	27	1376	105	99	1271	115	151
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

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 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 2 = SINGLE UNIT-3 AXLE TRUCKS 6 = BUSES AND TRUCKS WITH TRAILERS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILESCOUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 ASDEFINED ON ATTACHED INDEX MAP on page 7 using System ¹¹/₁₄.

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	4198	23527	4620	3952	4651	10527	7999	2390	6186	2770	7304
1	118	787	214	116	124	426	435	140	174	129	400
2	23	146	40	21	40	56	56	18	34	24	72
3	7	72	22	12	15	34	40	13	20	14	40
4	10	72	11	4	20	11	8	3	10	7	16
5	23	143	29	12	50	34	24	8	20	18	56
6	21	253	64	33	50	112	88	28	56	38	112
TOTAL ADT	4400	25000	5000	4150	4950	11200	8650	2600	6500	3000	8000
TOTAL H. COMM. ADT	202	1473	380	198	299	673	651	210	314	230	696
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

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0 = PASSENGER CARS AND 4 TIRE TRUCKS 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
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 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 3 OF 3

FOR

T.H. CSAH 18 S.P. ----- LENGTH ----- MILES

COUNTY Hennepin LOCATION From Smetana Road to CSAH 3

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 28 AS

DEFINED ON ATTACHED INDEX MAP on page 7 using System '14.

VEHICLE # TYPE	SEGMENT NUMBER									
	23	24	25	26	27	28				
0	2468	2132	1800	1894	22323	22643				
1	132	92	78	82	618	635				
2	24	11	9	10	116	119				
3	14	2	2	2	56	58				
4	5	4	3	4	64	65				
5	19	7	6	6	116	118				
6	38	2	2	2	207	212				
TOTAL ADT	2700	2250	1900	2000	23500	23850				
TOTAL H. COMM. ADT	232	118	100	106	1177	1207				
TOTAL DHV										
DIRECTIONAL DISTRIBUTION										

* VEHICLE TYPE CODE

- 0= PASSENGER CARS AND 4 TIRE TRUCKS
- 1= SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
- 2= SINGLE UNIT-3 AXLE TRUCKS
- 3= TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4= TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
- 5= TRACTOR-TRUCK OR SEM-TRAILER - 5 AXLES
- 6= BUSES AND TRUCKS WITH TRAILERS

Basic Data, Method, and Assumptions

The 1975 (System 16) and 1985 (System 14) ADT were transmitted in SPAR M-2 on February 9, 1970.

For System 14, the total heavy commercial traffic volumes were presented in the heavy truck computer study. The total heavy commercial traffic volumes for System 16 are assumed to be the same percent of ADT as volumes for System 14. No truck study for System 16 was made.

Land use was assumed to be residential, light commercial, or industrial. Using appropriate distributions from previous reports, the heavy commercial vehicle type distributions are shown in this report.